

REMARKS

This Amendment is fully responsive to the final Office Action dated July 2, 2010, issued in connection with the above-identified application. Claims 1-17 are pending in the present application. With this Amendment, claims 1, 6, 8 and 13 have been amended. Claims 1, 6, 8 and 13 have been amended merely to place the claims in preferred form for U.S. patent practice. The claims were not amended to address any prior art rejections made to the claims. Accordingly, no new matter has been introduced by the amendments made to the claims. Favorable reconsideration is respectfully requested.

In the Office Action, claims 1, 8 and 10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Naruse (U.S. Publication No. 2002/0183026, hereafter “Naruse”) in view of Markman (U.S. Publication No. 2003/022966, hereafter “Markman”), Delavega (U.S. Publication No. 2005/0034158, hereafter “Delavega”), Zhu et al. (U.S. Publication No. 2008/0183767, hereafter “Zhu”) and Miyaoku (U.S. Publication No. 2003/0051252, hereafter “Miyaoku”).

The Applicants assert that the cited prior art fails to disclose or suggest all the features recited in at least independent claims 1 and 8. For example, independent claim 1 recites *inter alia* the following features:

“[a] content reproduction device that performs streaming reproduction of a content, the device comprising:

a plurality of communication units configured to receive pieces of segmented data of a content transmitted from a content transmission device over a communication path, a part of the pieces of the segmented data of the content being received by one of said plurality of communication units and another part of the pieces of the segmented data of the content being received by another one of said plurality of communication units...” (Emphasis added).

The features emphasized above in independent claim 1 are similarly recited in independent claim 8 (as amended). Additionally, the features emphasized above in independent claim 1 (and similarly recited in independent claim 8) are fully supported by the Applicants’ disclosure (see e.g. ¶[0132]-¶[0135]).

The present invention (as recited in independent claims 1 and 8) is distinguishable from the cited prior art in that (i) one of the plurality of communication units receives a part of the

pieces of the segmented data, and (ii) another one of the plurality of communication units receives another part of the pieces of the segmented data.

For example, in one embodiment, the content transmission device 20 reads the content at the bit rate of 400 Kbps in response to a content request signal, segments the content into packets (e.g., each of which is equivalent to 200 Kbps), and transmits one of the packets to the wireless LAN communication unit 104 and the other packet to the cellular phone 101. For each reception of a new content request signal, the content transmission device 20 reads the content at the bit rate according to the new content request signal, segments the content according to the content request signal, and transmits the segmented pieces of content as packets (see e.g., Fig. 19; and ¶[0132]-¶[0135]).

The present invention (as recited in independent claims 1 and 8) effectively achieves streaming reproduction of content even if the maximum rate of a transmission speed of one of the communication units is below a rate of the streaming content.

In the Office Action, although the Examiner relies on the combination of Naruse, Markman, Delavega, Zhu and Miyaoku for disclosing or suggesting all the features recited in at least independent claims 1 and 8, the Examiner relies specifically on Miyaoku for disclosing or suggesting the features emphasized above in independent claim 1 (and similarly recited in independent claim 8).

In particular, the Examiner relies on ¶[0509]-¶[0520] of Miyaoku. Miyaoku in ¶[0509]-¶[0520] discloses a viewer apparatus 4001 that includes a related information obtaining part 4011, an input part 4012, a content information browsing part 4013, a broadcast receiving part 4014, a broadcast information decoding part 4015, a display reproducing part 4016, a network communication part 4017, and a partial broadcast information buffer 4019.

In relevant part, the broadcast receiving part 4014 is an antenna that receives broadcast information from a broadcasting station 4006. Additionally, a broadcast information demodulating decoding part 4015 demodulates and decodes the broadcast information received by the broadcast receiving part 4014, and outputs broadcast information to a displaying and reproducing part 4016 and to the related information obtaining part 4011.

Miyaoku also discloses that when a viewer operates a related information obtaining instruction button 4018, the related information obtaining part 4011 generates partial broadcast information from the broadcast information which the viewer is watching, sends the partial

broadcast information from the network communication part 4017 to the related information providing server 4002 via the network 4005, obtains related information sent from the related information providing server 4002, and outputs a URL included in the related information to the content information browsing part 4013.

Finally, Miyaoku discloses that when the viewer operates the related information obtaining instruction button 4018 while a viewer views and listens to broadcast information, the related information obtaining part 4011 sends the broadcast information, or characteristic amount information obtained by converting the broadcast information, to the related information providing server 4002 as the partial broadcast information.

Thus, the most relevant portions of ¶[0509]-¶[0520] of Miyaoku noted above disclose a viewer apparatus 4001 that includes a broadcast receiving part 4014 that receives broadcast information and a network communication part 4017 that receives information related to the broadcast information. Additionally, a broadcast information demodulating decoding part 4015 demodulates and decodes the broadcast information received by the broadcast receiving part 4014, and outputs broadcast information to the displaying and reproducing part 4016 and to the related information obtaining part 4011.

However, nothing in ¶[0509]-¶[0520] of Miyaoku discloses or suggests that a part of the pieces of segmented data of content is received by one of a plurality of communication units and another part of the pieces of the segmented data of the content is received by another one of the plurality of communication units, as recited in independent claims 1 and 8.

Additionally, the related information disclosed in Miyaoku is information related to a specific piece of broadcast information, such as profile information of characters in a movie described in HTML, a title, or information about a composer (see e.g., ¶[0511]).

Suppose a case where the maximum value of the transmission speed of the broadcast receiving part 4014 is less than the rate assigned to the content for streaming. Here, even though the transmission speed of the network communication part 4017 is fast enough, the content cannot be streaming-reproduced.

On the contrary, in the present invention (as recited in independent claims 1 and 8), the pieces of segmented data are packets of content that indicate content segmented into a certain data size. Additionally, a piece of content data is received by one communication unit while another piece of the content data is received by a different communication unit.

As noted above, Naruse, Markman, Delavega and Zhu are not relied on for disclosing or suggesting the features of the present invention emphasized and discussed above. Accordingly, based on the above discussion of Miyaoku, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku would result in, or otherwise render obvious, the features recited in independent claims 1 and 8. Likewise, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku would result in, or otherwise render obvious, claim 10 at least by virtue of its dependency from independent claim 8.

In the Office Action, claims 2-4, 7, 9 and 11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Naruse in view of Markman, Delavega, Zhu and Miyaoku, and further in view of Ji et al. (U.S. Publication No. 2005/0043999, hereafter “Ji”).

Claims 2-4 depend from independent claim 1. As noted above, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku would result in, or otherwise render obvious, independent claim 1. Additionally, Ji fails to overcome the deficiencies noted above in Naruse, Markman, Delavega, Zhu and Miyaoku. Accordingly, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku with Ji would result in, or otherwise render obvious, claims 2-4 at least by virtue of their dependencies from independent claim 1.

With regard to independent claims 7 and 9, the claims include similar features to that noted above for independent claim 1. That is, independent claim 7 recites *inter alia* the following features:

“[a] content transmission device that transmits a content over a communication path, the device comprising:...

transmit the pieces of segmented data of the content addressed to the addresses via said communication unit such that a part of the pieces of the segmented data of the content is received by one of said plurality of communication units and another part of the pieces of the segmented data of the content is received by another one of said plurality of communication units, and the pieces of segmented data each includes a counter indicating an order of the segmentation performed....” (Emphasis added).

The features emphasized above in independent claim 7 are similarly recited in independent claim 9. Additionally, the features emphasized above in independent claim 7 (and similarly recited in independent claim 9) are fully supported by the Applicants’ disclosure (see ¶[0132]-¶[0135]).).

As noted above, independent claims 7 and 9 include similar features to those emphasized and discussed above with reference to independent claim 1. Additionally, in the Office Action, although the Examiner relies on the combination of Naruse, Markman, Delavega, Zhu, Miyaoku and Ji for disclosing or suggesting all the features recited in independent claims 7 and 9, the Examiner relies specifically on Miyaoku for disclosing or suggesting the features emphasized above in independent claim 7 (and similarly recited in independent claim 9). Therefore, independent claims 7 and 9 are distinguishable from the cited prior art for similar reasons noted above for independent claim 1.

Accordingly, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku would result in, or otherwise render obvious, independent claims 7 and 9. Additionally, Ji fails to overcome the deficiencies noted above in Naruse, Markman, Delavega, Zhu and Miyaoku. Accordingly, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku with Ji would result in, or otherwise render obvious, independent claims 7 and 9. Likewise, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku with Ji would result in, or otherwise render obvious, claim 11 at least by virtue of its dependency from independent claim 9.

In the Office Action, claims 5 and 6 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Naruse, Markman, Delavega, Zhu and Miyaoku, and further in view of Chinomi et al. (U.S. Patent No. 7,228,137, hereafter “Chinomi”).

Claims 5 and 6 depend from independent claim 1. As noted above, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku would result in, or otherwise render obvious, independent claim 1. Additionally, Chinomi fails to overcome the deficiencies noted above in Naruse, Markman, Delavega, Zhu and Miyaoku. Accordingly, no combination of Naruse, Markman, Delavega, Zhu and Miyaoku with Chinomi would result in, or otherwise render obvious, claims 5 and 6 at least by virtue of their dependencies from independent claim 1.

In the Office Action, claims 12, 14 and 15 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Naruse in view of Markman, Delavega, Miyaoku and Ji, and further in view of Uhlik (U.S. Publication No. 2007/0112948, hereafter “Uhlik”); claim 13 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Naruse in view of Markman, Delavega, Miyaoku, Ji and Uhlik, and further in view of Zhu; and claims 16 and 17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Naruse, Markman, Delavega, Miyaoku, Ji and Uhlik, and further in view of Chinomi.

Independent claim 12 includes similar features to those of independent claim 1 noted above. Specifically, independent claim 12 recites the following features:

“[a] content reproduction device that performs streaming reproduction of a content, the device comprising:

a plurality of communication units configured to receive pieces of segmented data of a content transmitted from a content transmission device over a communication path, a part of the pieces of the segmented data of the content being received by one of said plurality of communication units and another part of the pieces of the segmented data of the content being received by another one of said plurality of communication units....”
(Emphasis added).

The features emphasized above in independent claim 12 are fully supported by the Applicants’ disclosure (see ¶[0132]-¶[0135]).

As noted above, independent claim 12 includes similar features to those emphasized and discussed above with reference to independent claim 1. In the Office Action, although the Examiner relies on the combination of Naruse, Markman, Delavega, Zhu, Miyaoku, Ji and Uhlik for disclosing or suggesting all the features recited in independent claim 12, the Examiner relies specifically on Miyaoku for disclosing or suggesting the features emphasized above in independent claim 12. Therefore, independent claim 12 is distinguishable from the cited prior art for similar reasons noted above for independent claim 1.

Accordingly, no combination of Naruse, Markman, Delavega and Miyaoku would result in, or otherwise render obvious, the features of independent claim 1. Additionally, Ji and Uhlik fail to overcome the deficiencies noted above in Naruse, Markman, Delavega and Miyaoku. Accordingly, no combination of Naruse, Markman, Delavega and Miyaoku with Ji and Uhlik would result in, or otherwise render obvious, independent claim 12.

Claims 13-17 depend from independent claim 12. As noted above, Naruse, Markman, Delavega, Miyaoku, Ji and Uhlik fail to disclose or suggest all the features recited in independent claim 12. Additionally, Zhu and Chinomi fail to overcome the deficiencies in Naruse, Markman, Delavega, Miyaoku, Ji and Uhlik. Accordingly, no combination of Naruse, Markman, Delavega, Miyaoku, Ji and Uhlik with Zhu or Chinomi would result in, or otherwise render obvious, claims 13-17 at least by virtue of their dependencies from independent claim 12.

In light of the above, the Applicants submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the outstanding Office Action, and pass the present application to issue.

Respectfully submitted,

Toshiaki MORI et al.

By /Mark D. Pratt/
2010.09.27 12:43:07 -04'00'
Mark D. Pratt
Registration No. 45,794
Attorney for Applicants

MDP/mac
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
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